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## Sciopticon

### SPECIFICATIONS FOR THE CONSTRUCTION

Designed by C. W. Carman

The sciopticon, or "magic lantern," working drawings of which are given herewith, is designed in such a manner that it can be constructed in the manual training room or carpenter-shop. It not infrequently happens that the teacher in a country school or small town finds that the work could be made more profitable and interesting by means of some form of projecting apparatus. The appropriation for apparatus, however, is often found to be too limited to permit of a purchase from the regular manufacturers. An enterprising teacher will find a way to obtain the few dollars needed to provide the apparatus the working drawings for which are here given.

**SPECIFICATIONS.**—The apparatus consists of a pine board 24 inches long and 8 inches wide. This board is supported upon two strips 1 inch square and 24 inches long. On one end of the board with pine strips 1 inch square is built a rectangular frame, 10 inches long, 8 inches wide, and 11 inches high. Extending from this frame, along the center of the board to the other end, is attached a guide for the objective support. The front of the frame is closed by an inch board, in the center of which is a  $4\frac{1}{2}$ -inch opening for receiving the condensing lens. Grooved strips are mounted on the front as a slide-holder. The sides and rear are closed by means of woollen cloth buttoned

on the frame. The objective support is constructed from sheet-iron and a hollow wood cylinder. The top is constructed from sheet-iron and can be obtained at any tin-shop. Any form of illuminant such as oil lamp, acetylene (bicycle lamp), gas, lime-light, incandescent or arc light, may be used.

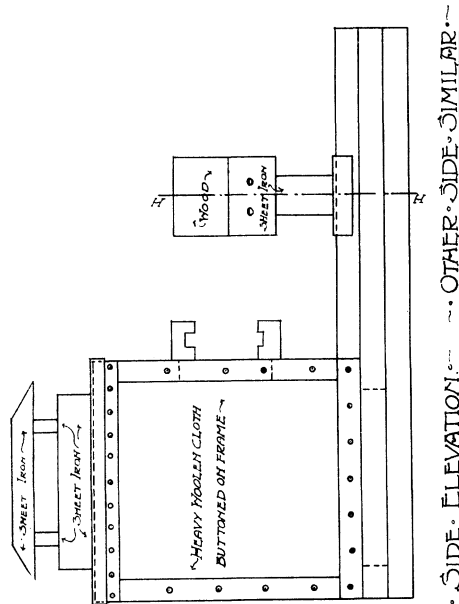
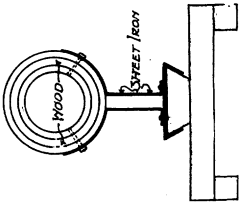
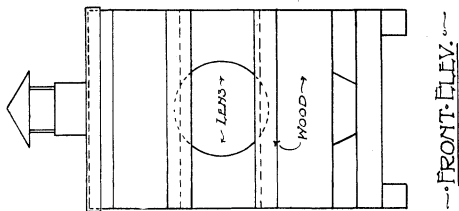
The following is an estimate of the expense:

Lumber, screws, and carriage but-	
tons.....	\$0.30
Sheet-iron top and objective sup-	
port.....	1.50
Condensing lens, mounted.....	2.00
Objective, mounted.....	3.00
Oil lamp with reflector.....	.50
Screen, $2\frac{1}{2}$ yards sheeting, 2 yards	
wide.....	.60
Total.....	<hr/> \$7.90

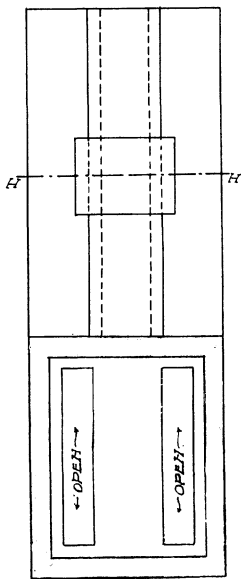
This apparatus may be converted into an heliopticon for the additional sum of \$5.00.

Other forms of illuminants may be obtained at the following prices: Acetylene outfit, \$16.00; lime-light burner, \$6.00; incandescent electric lamp, \$2.50; incandescent gas burner, \$1.00; arc light, \$8.00.

The form of illuminant to be used depends upon the locality in which the apparatus is to be operated. Electricity is the cheapest and most satisfactory, if it can be obtained.

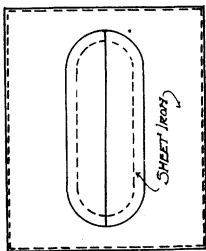
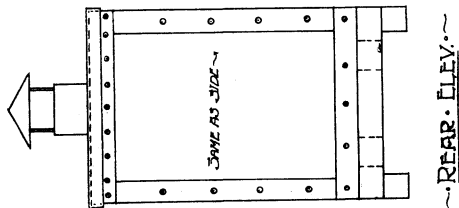


OTHER SIDE SIMILAR



SCOPTICON

DESIGNED BY C.W. CARMAN



1 FOOT = SCALE